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In Response

Instincts—Who Needs Them?

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In a recent "In Response," Todd (1987) pointed out that behaviorism is often naively presented as "deny[ing] the role of innate factors in behavior" (p. 117). He argued that such publications as Skinner's "The Phylogeny and Ontogeny of Behavior" (1966) and "Selection by Consequences" (1981) demonstrate that behaviorism *does not* deny the importance of instinctive behavior. To argue in terms of "innate" behavior and "learned" behavior, however, is to get caught in an "obsolete" dichotomy (Kuo, 1967, p. 110), as I am sure Todd appreciates. But, regardless of the position taken by behaviorism with respect to innate contributions to behavior, I would like to point out that there is an alternative to the innate-acquired dichotomy.

Individuals such as Kantor (1923), Kuo (1967), Lehrman (1953), and Schneirla (1966) have argued that the innate-acquired dichotomy is not scientifically useful. (It is interesting to note that this dichotomy originally separated *classical* ethology from comparative psychology—see Dewsbury & Rethlingshafer, 1973; Purton, 1978.) If the dichotomy is not useful, then advocating a particular position with respect to the dichotomy—either behavior is innate or behavior is learned—is not useful. One cannot escape the dangers of a useless dichotomy by retreating to either of its extremes. I use Kuo's (1967) term—behavioral epigenesis—to represent an alternative to the innate-acquired dichotomy.

The epigenetic view takes development as fundamental. That is, behavior is a continuous process from just prior to birth up to death. To find answers as to how an organism behaves as it does, it is necessary to examine five classes of factors—morphological factors, biophysical and biochemical factors, stimuli, history of interactions, and contextual factors (Kuo, 1967, pp. 22–25). As an example, Kuo found the pecking of the avian chick was influenced by such prehatching factors as:

> head lunging, opening and closing of the beak, swallowing, digestive activities, both mechanical and chemical, and the elimination of waste products .... Of course, the pattern of pecking as such does not exist prior to hatching. (Kuo, 1967, p. 109)

The posthatching development and coordination of many other factors are also necessary for pecking to develop. As Kuo comments, it is useless to examine all these complex developmental processes and query as to whether the pecking is innate or learned (1967, p. 109).

Although one might argue that the term "innate" is useful for *describing* relatively stable patterns of responding within species, this still perpetuates misunderstandings, primarily because the constructions of "innate" and "learned" are more typically used to *explain* the origins of behavior. The danger of labeling behavior, especially as "innate," is that the label "obscures the necessity of investigating developmental *processes* in order to gain insight into the actual mechanisms of behavior and their interrelations" (Lehrman, 1953, p. 345).

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REFERENCES

Dewsbury, D. A., & Rethlingshafer, D. A. (1973). *Comparative psychology: A modern survey.* New York: McGraw-Hill.

Kantor, J. R. (1923). The problem of instincts and its relation to social psychology. *Journal of Abnormal Psychology and Social Psychology, 18,* 50–77.

Kuo, Z. Y. (1967). *The dynamics of behavior development: An epigenetic view.* New York: Random House.

Lehrman, D. S. (1953). A critique of Konrad Lorenz's theory of instinctive behavior. *The Quarterly Review of Biology, 28,* 337–363.

Purton, A. C. (1978). Ethological categories of behaviour and some consequences of their conflation. *Animal Behaviour, 26,* 653–670.

Schneirla, T. C. (1966). Behavioral development and comparative psychology. *The Quarterly Review of Biology, 41,* 283–302.

Skinner, B. F. (1966). The phylogeny and ontogeny of behavior. *Science, 153,* 1205–1213.

Skinner, B. F. (1981). Selection by consequences. *Science, 218,* 501–504.

Todd, J. T. (1987). The great power of steady misrepresentation: Behaviorism's presumed denial of instinct. *The Behavior Analyst, 10,* 117–118.